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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/607,913	06/27/2003	Axo Chi	104900	8159

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SUITE 4200
CHICAGO, IL 60603-5803

EXAMINER

SHAPIRO, LEONID

ART UNIT

PAPER NUMBER

2677

DATE MAILED: 09/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/607,913	CHI ET AL.
	Examiner	Art Unit
	Leonid Shapiro	2673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 27 June 2003.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-20 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-20 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 27 June 2003 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date _____.
 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
 5) Notice of Informal Patent Application (PTO-152)
 6) Other: _____.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1-2, 4-11,13-17, 19 are rejected under 35 U.S.C. 102(e) as being anticipated by Ronzani et al. (US Patent No. 6,683,584 B2).

As to claim 1, Ronzani et al. teaches a head-mounted display (See from Col. 2, Line 66 to Col. 3, Line 9), comprising:

a main wearing frame for placing on a wearer's head (See Fig. 55, item 1925, Col. 24, Lines 29-30);
style="padding-left: 40px;">a support frame connected to the main wearing frame (See Fig. 55, items 1921a, 1921b, Col. 24, Lines 29-32);
style="padding-left: 40px;">a video output terminal module fixed on the support frame support (See Fig. 55, items 1921a, 1921b, 1923a, 1923b, Col. 24, Lines 29-37), the video output terminal module including a right output socket (See Fig. 55, item 1923a) and a left output socket (See Fig. 55, item 1923b); and

at least one display unit connected to either the right output socket or the left output socket (See Fig. 55, items 1200, 1924, Col. 24, Lines 37-46).

As to claims 2, 17, 19 Ronzani et al. teaches the video output terminal module includes an output terminal base (See Fig. 55, items 1921a, 1921b, 1923a, 1923b, Col. 24, Lines 29-37) for fixing the right output socket (See Fig. 55, item 1923a) and the left output socket on the support frame (See Fig. 55, item 1923b).

As to claim 4, Ronzani et al. teaches the video output terminal module further includes at least one extension socket connected to either the right output socket or the left output socket (See Fig. 55, items 1200, 1924, Col. 24, Lines 37-46).

As to claims 5-7, 15-16 Ronzani et al. teaches the support frame joins the main wearing frame by a rotatable joint, includes at least two links engaged by a rotatable joint, the support frame is made of a flexible and shapeable snake tub (See Fig. 55, items 1921a, 1921b, 1922a, 1922b, Col. 24, Lines 29-38).

As to claim 8, Ronzani et al. teaches display unit is suitable for both eyes of the wearer (See Fig. 55, items 1200, 1924, 1929, Col. 24, Lines 37-46).

As to claim 10, Ronzani et al. teaches a microphone extending from the main wearing frame and near the wearer's mouth (See Fig. 57D, item 1330, Col. 25, Lines 10-11).

As to claim 9, 11, 14 Ronzani et al. teaches a speaker provided on the main wearing frame and near ears of the wearer and two secondary wearing frames separately going forward both ears of the wearer (See Fig. 55, items 1921a, 1921b, 1925, Col. 24, Lines 29-32).

As to claim 13, Ronzani et al. teaches a head-mounted display (See from Col. 2, Line 66 to Col. 3, Line 9), comprising:

a clamping mechanism (See Fig. 55, item 1925, Col. 24, Lines 29-30);
a support frame connected to the main wearing frame (See Fig. 55, items 1921a, 1921b, Col. 24, Lines 29-32);
a video output terminal module fixed on the support frame support (See Fig. 55, items 1921a, 1921b, 1923a, 1923b, Col. 24, Lines 29-37), the video output terminal module including a right output socket (See Fig. 55, item 1923a) and a left output socket (See Fig. 55, item 1923b); and
at least one display unit connected to either the right output socket or the left output socket (See Fig. 55, items 1200, 1924, Col. 24, Lines 37-46).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 3,18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ronzani et al. as applied to claims 1, 13 above, and further in view of Masashige (JP 08-251509).

Ronzani et al. does not disclose plurality of sliding mechanisms for the output terminal base and the right and left output sockets to have relative sliding movements.

Masashige teaches sliding mechanisms for the output terminal base and the right and left output modules to have relative sliding movements (See Drawings 1-3, items 1-3, paragraph 0012-0013).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate teaching of Masashige into Ronzani et al. system in order to provide a simple and compact head mounted display without the complicated adjustment function of an optical system (See Abstract in Masashige reference).

3. Claims 12, 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ronzani et al. as applied to claims 1, 13 above, and further in view of Miller et al. (US Patent No. 6,729,726 B2).

Ronzani et al. does not disclose the main wearing frame includes a Bluetooth modular for receiving external video and audio signals.

Miller et al. teaches a Bluetooth modular for receiving external video and audio signals (See Figure 21, items 200, 2102, Col. 12, Lines 13-39).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate teaching of Miller et al. into Ronzani et al. system in order to provide hand-free two-way communication (See Col. 1, Lines 16-19 in the Miller et al. reference).

Telephone Inquire

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonid Shapiro whose telephone number is 571-272-7683. The examiner can normally be reached on 8 a.m. to 5 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on 571-272-7681. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LS
08.30.05



VIJAY SHANKAR
PRIMARY EXAMINER